


Exhibit 2

Infringement Claim Chart for U.S. Pat. No. US7130430B2 v. Creative Technology Ltd.
("Defendant")

Claim 2	Evidence
<p>2. A speaker system for producing localized regions of sound comprising:</p>	<p>The Creative Technology Ltd. soundbar is a speaker system for producing localized regions of sound.</p> <p>For example, the Creative Technology Ltd. soundbar produces a surround sound effect. The surround sound effect causes a listener facing the soundbar to perceive that sound emanating from the soundbar is originating at various locations in the hall that can be behind and to the left of the listener, referred to as surround left, and at another location behind and to the right of the listener, referred to as surround right.</p> <div data-bbox="997 659 1396 1336" style="border: 2px solid green; padding: 10px; text-align: center;"><p><u>Surround sound</u> <u>envelopment</u> <u>without installation</u> <u>of multiple satellite</u> <u>speakers at</u> <u>various corners of</u> <u>the hall</u></p></div>

	<div data-bbox="1003 261 1377 496"> <p>Richer sound, and deeper bass that built-in speakers can't offer</p> </div> <div data-bbox="1045 553 1360 911"> <p>DOLBY AUDIO</p> <p>We've partnered with Dolby on various projects, working closely with them on surround acoustics, to design products that let you bring the cinema home.</p> </div> <div data-bbox="583 964 1818 1117"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> </div> <p>Source: https://en.creative.com/soundbars/</p>
a multiplicity of audio frequency speakers;	The Creative Technology Ltd. soundbar includes a multiplicity of audio frequency speakers.

	<p>For example, the Creative Technology Ltd. soundbar includes 7-Channel multiple audio speakers positioned along a front face of the soundbar.</p> <div data-bbox="877 347 1528 992" style="border: 1px solid green; padding: 10px;"> <ul style="list-style-type: none"> ▶ First-of-its-kind Dolby Atmos® Speaker System soundbar with expertly-tuned surround acoustics by Dolby ▶ <u>7-channel, Class-D audiophile-grade amps</u> ▶ Intelligent dialog enhancing algorithms for clear and full-bodied dialogs ▶ Built-in Super X-Fi Headphone Holography with SXFI-out support (via headphones) ▶ Also works with <u>SXFI THEATER</u> headphones ▶ Customizable EQ presets: Movies, Music, Night, Neutral, SuperWide ▶ Wireless compact 10" driver subwoofer ▶ Future-proofed and compatible with the latest 8K TV </div> <p>Source: https://en.creative.com/soundbars/</p>
<p>at least one defined sound target spaced from each of the speakers of the multiplicity of speakers,</p>	<p>The Creative Technology Ltd. soundbar has at least one defined sound target spaced from each of the speakers of the multiplicity of speakers. Each speaker has a means for applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target. So that substantially identical sound from each speaker reaches the sound target at the same time.</p>

wherein each speaker has a means for applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target, so that substantially identical sound from each speaker reaches the sound target at the same time;

For example, each of the Creative Technology Ltd. speakers is connected to an audio amplifier. A surround left channel signal is provided to each speaker via the speaker's respective amplifier. The surround left channel is delayed slightly for speakers on the listener's left compared to speakers on the listener's right. The amount of delay is such that sound waves emanating from each of the speakers reach the surround left location at the same time, thereby interfering constructively to produce a resultant sound wave having peak spatial amplitude at the surround left location. When this wave reflects back to the listener, the listener perceives that the sound originated from the surround left location.

Jointly developed by Creative and Dolby Laboratories, this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.

- ▶ First-of-its-kind Dolby Atmos® Speaker System soundbar with expertly-tuned surround acoustics by Dolby
- ▶ 7-channel, Class-D audiophile-grade amps
- ▶ Intelligent dialog enhancing algorithms for clear and full-bodied dialogs
- ▶ Built-in Super X-Fi Headphone Holography with SXFI-out support (via headphones)
- ▶ Also works with SXFI THEATER headphones
- ▶ Customizable EQ presets: Movies, Music, Night, Neutral, SuperWide
- ▶ Wireless compact 10" driver subwoofer
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Source: <https://en.creative.com/soundbars/>

<p>at least a first defined sound target and a second defined sound target, the second sound target being spaced from the first sound target, and the first sound target and the second sound target being spaced from each of the speakers of the multiplicity of speakers,</p>	<p>The Creative Technology Ltd. soundbar has at least a first defined sound target and a second defined sound target. The second sound target is spaced from the first sound target. The first sound target and the second sound target are spaced from each of the speakers.</p> <p>For example, the Creative Technology Ltd. Soundbar surrounds to various locations that can be left location is at a rear position on a left-side wall of a nominally sized hall or room. The surround right location is at a rear position on the right-side wall of the room.</p> <div data-bbox="562 607 1845 1312"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> <ul style="list-style-type: none"> ▶ First-of-its-kind Dolby Atmos® Speaker System soundbar with expertly-tuned surround acoustics by Dolby ▶ <u>7-channel, Class-D audiophile-grade amps</u> ▶ Intelligent dialog enhancing algorithms for clear and full-bodied dialogs ▶ Built-in Super X-Fi Headphone Holography with SXFI-out support (via headphones) ▶ Also works with <u>SXFI THEATER</u> headphones ▶ Customizable EQ presets: Movies, Music, Night, Neutral, SuperWide ▶ Wireless compact 10" driver subwoofer ▶ Future-proofed and compatible with the latest 8K TV </div>
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	<div data-bbox="1018 233 1386 844" data-label="Image"> <p>Surround sound envelopment without installation of multiple satellite speakers at various corners of the hall</p> </div> <p>Source: https://en.creative.com/soundbars/</p>
<p>and wherein the means for applying a time varying audio drive voltage comprises: at least a first audio source which is offset in time by an amount which is</p>	<p>The means for applying a time varying audio drive voltage comprises at least a first audio source which is offset in time by an amount which is related to the distance between each speaker and the first defined sound target.</p> <p>For example, a delay is added to the surround left channel (e.g. first audio source) before it is applied to a speaker on the left-side of the soundbar, as viewed from the listener's position. The delay relates to the distance between the speaker and the surround left location in the nominally sized room, whereby the speaker closest to the surround left location has the most delay. This enables the soundbar to produce directional audio.</p>

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	<div data-bbox="995 233 1415 695" data-label="Image"> </div> <div data-bbox="558 711 1843 909" data-label="Text"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> </div> <p>Source: https://en.creative.com/soundbars/</p>
<p>at least a second audio source which is offset in time by an amount which is related to the distance between each speaker and the second defined</p>	<p>The Creative Technology Ltd. soundbar includes at least a second audio source which is offset in time by an amount which is related to the distance between each speaker and the second defined sound target. The sum of the first audio source and the second audio source is used to produce the time varying audio drive voltage. Substantially identical sound from the first audio source signal reaches the first sound target at the same time, and substantially identical sound from the second audio source signal reaches the second target at the same time.</p> <p>For example, a delay is added to the surround right channel (e.g. second audio source) before it is applied to a speaker on the right-side of the soundbar. The delay relates to</p>

sound target wherein a sum of the first audio source which is offset in time and the second audio source which is offset in time is used to produce the time varying audio drive voltage so that substantially identical sound from the first audio source signal reaches the first sound target at the same time, and substantially identical sound from the second audio source signal reaches the second target at the same time.

the distance between the speaker and the surround right location, whereby the speaker closest to the surround right location has the most delay. Each speaker is provided, via its amplifier, with a surround left channel signal and a surround right channel signal, each signal having a respective delay. The signals are added together before being input to the respective amplifier. Consequently, each speaker emits a sound wave comprising audio from the surround left channel and from the surround right channel, the audio from each channel having an appropriate amount of delay such that the surround left audio reaches the surround left location at the same time as the surround right audio reaches the surround right location.



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	<div data-bbox="1024 269 1377 656" data-label="Image"> </div> <div data-bbox="709 675 1696 824" data-label="Text"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> </div> <p>Source: https://en.creative.com/soundbars/</p>
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Infringement of the '430 patent	
Claim #3	Evidence
<p>3. A speaker system for producing localized regions of sound comprising:</p>	<p>The Creative Technology soundbar is speaker a system for producing localized regions of sound.</p> <p>For example, the soundbar produces a surround sound effect. The surround sound effect causes a listener facing the soundbar to perceive that sound emanating from the soundbar is originating at a location behind and to the left of the listener, referred to as surround left, and at another location behind and to the right of the listener, referred to as surround right.</p>




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	<div data-bbox="995 233 1348 623" data-label="Image"> </div> <div data-bbox="527 643 1814 837" data-label="Text"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> </div> <p>Source: https://en.creative.com/soundbars/</p>
a multiplicity of audio frequency speakers;	<p>The Creative Technology soundbar includes a multiplicity of audio frequency speakers.</p> <p>For example, the Creative Technology Ltd. soundbar includes 7-Channel multiple audio speakers positioned along a front face of the soundbar.</p>

	<ul style="list-style-type: none"> ▶ First-of-its-kind Dolby Atmos® Speaker System soundbar with expertly-tuned surround acoustics by Dolby ▶ <u>7-channel, Class-D audiophile-grade amps</u> ▶ Intelligent dialog enhancing algorithms for clear and full-bodied dialogs ▶ Built-in Super X-Fi Headphone Holography with SXFI-out support (via headphones) ▶ Also works with <u>SXFI THEATER</u> headphones ▶ Customizable EQ presets: Movies, Music, Night, Neutral, SuperWide ▶ Wireless compact 10" driver subwoofer ▶ Future-proofed and compatible with the latest 8K TV <p>Source: https://en.creative.com/soundbars/</p>
at least one defined sound target spaced from each of the speakers of the multiplicity of speakers, wherein each speaker has a means for	<p>The Creative Technology soundbar has at least one defined sound target spaced from each of the speakers of the multiplicity of speakers. Each speaker has a means for applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target. So that substantially identical sound from each speaker reaches the sound target at the same time.</p> <p>For example, each of the speakers is connected to an audio amplifier. A surround left channel signal is provided to each speaker via the speaker's respective amplifier. The surround left channel is delayed slightly for speakers on the listener's left compared to</p>

<p>applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target, so that substantially identical sound from each speaker reaches the sound target at the same time; and</p>	<p>speakers on the listener's right. The amount of delay is such that sound waves emanating from each of the speakers reaches the surround left location at the same time, thereby interfering constructively to produce a resultant sound wave having a peak spatial amplitude at the surround left location. When this wave reflects back to the listener, the listener perceives that the sound originated from the surround left location.</p> <div data-bbox="525 527 1816 1242"> <p>Jointly developed by Creative and Dolby Laboratories, <u>this soundbar is engineered with personal involvement by Dolby's experts and their innovative acoustics concept. Built with audiophile-grade components and our audio engineering know-hows, expect powerful and cinematic audio with that all-familiar surround sound akin to a real cinema, at the comfort of your home.</u></p> <ul style="list-style-type: none"> ▶ First-of-its-kind Dolby Atmos® Speaker System soundbar with expertly-tuned surround acoustics by Dolby ▶ <u>7-channel, Class-D audiophile-grade amps</u> ▶ Intelligent dialog enhancing algorithms for clear and full-bodied dialogs ▶ Built-in Super X-Fi Headphone Holography with SXFI-out support (via headphones) ▶ Also works with <u>SXFI THEATER</u> headphones ▶ Customizable EQ presets: Movies, Music, Night, Neutral, SuperWide ▶ Wireless compact 10" driver subwoofer ▶ Future-proofed and compatible with the latest 8K TV </div>
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<p>wherein the means for applying a time varying audio drive voltage includes a class D amplifier.</p>	<p>The means for applying a time varying audio drive voltage includes a class D amplifier.</p> <p>For example, each amplifier connected to a respective speaker is a class D audio amplifier.</p>

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Accused Product List

CREATIVE SXFI CARRIER
SOUND BLASTER KATANA V2
SOUND BLASTER KATANA V2X
SOUND BLASTERX KATANA
CREATIVE STAGE 360
CREATIVE STAGE V2
CREATIVE STAGE
CREATIVE STAGE SE
CREATIVE STAGE AIR V2
CREATIVE STAGE AIR
Sound Blaster Katana SE

References

- [1] CREATIVE SXFI CARRIER
<https://us.creative.com/p/speakers/creative-sxfi-carrier>
- [2] SOUND BLASTER KATANA V2
<https://us.creative.com/p/speakers/sound-blaster-katana-v2>
- [3] SOUND BLASTER KATANA V2X
<https://us.creative.com/p/speakers/sound-blaster-katana-v2x>
- [4] SOUND BLASTERX KATANA
<https://us.creative.com/p/speakers/sound-blasterx-katana>
- [5] CREATIVE STAGE 360
<https://us.creative.com/p/speakers/creative-stage-360>

[6] CREATIVE STAGE V2

<https://us.creative.com/p/speakers/creative-stage-v2>

[7] CREATIVE STAGE

<https://us.creative.com/p/speakers/creative-stage>

[8] CREATIVE STAGE SE

<https://us.creative.com/p/speakers/creative-stage-se>

[9] CREATIVE STAGE AIR V2

<https://us.creative.com/p/speakers/creative-stage-air-v2>

[10] CREATIVE STAGE AIR

<https://en.creative.com/soundbars/>

[11] Sound Blaster Katana SE

<https://us.creative.com/p/speakers/sound-blaster-katana-se>